100/1950

Barnwood House

Hospital for Mental and Nervous Disorders,

Near Gloucester.

Eighty-ninth

Annual Report

For the Year 1948.

PA 924/8

Printed by H. OSBORNE, Gloucester.

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REPORT

OF THE

HOUSE COMMITTEE

The prolonged uncertainty as to the future status of the Hospital, and of its Governing Body, was satisfactorily ended in June 1948 by the receipt of a formal notice from the Minister of Health that he had decided to disclaim the Hospital from the operation of the National Health Service Act; thus leaving the Hospital properties and funds in the sole administration of the Governors. The Committee desire to record their pleasure at the successful outcome of the representations which were made to this end, and their renewed confidence and hope in carrying on and improving the work of the Hospital.

The settlement of this issue has enabled the Committee to turn once more to the maintenance and improvement of their buildings and grounds, so long interrupted by War conditions, and the uncertain outlook. The construction of a new boundary wall to replace the disintegrated wooden fence along Church Lane, to be continued right across the Southern boundary to Upton Lane, was begun, and when completed will do much to restore the privacy of the grounds and to protect the property. In Church Lane the wall was set back at certain points to comply with the new road-line of the planning authority.

A completely new heating system, electrically operated, was installed in the Chapel, which had

become too cold for use by patients in winter; and the organ there was cleaned and repaired and fitted with electric blowing equipment.

The entrance roadway was re-surfaced in macadam, and the removal of the large stone piers has greatly improved the entry and exit to the main road, which were becoming increasingly dangerous with the growing volume of traffic.

Some refurnishing and upholstering has been accomplished in the No. 1 Ladies' wing, which had become unduly shabby and worn.

At the Laundry two new washing machines and hydro-extractors were installed, and redecoration, long overdue, was begun.

The Lodge, which had been closed for some little time, had shown such severe cracks in the walls that the architect's advice was sought, and upon his recommendation the house was pulled down, all the useful material being taken into the building stores.

During the year agreement was reached with the Gloucestershire County Council to lease to them for 21 years a site of about three acres adjoining Upton Lane, formerly occupied by a hutted camp of the Royal Air Force, for the erection of temporary County offices.

At Woodchester the Park Farm was taken over by the Committee at Lady Day to be farmed in conjunction with Longwood Farm. A decision was taken to build up a dairy herd there, and a contract was made with the Milk Marketing Board for the sale of milk wholesale; and as a result of this step extensive repairs were made to the cowsheds and farm buildings, arrangements were begun to split

the farm house so as to form two dwellings for farm workers, and the construction close by of two new cottages for the same purpose was begun.

The boundary wall and entrance gates to the Park from the Nympsfield road were removed and re-erected further back from the road, greatly improving visibility for traffic at this dangerous corner as well as the appearance of the entrance. A low dry stone wall was built against the edge of the grass verge. This work was done in conjunction with the County planning authority who gave every assistance and expressed satisfaction with the results.

The Soldiers', Sailors', and Airmen's Families Association vacated the premises at Bownham Park at the end of the year, and their tenancy expires in May 1949.

The work of the Research Department under Dr. Ashby and his assistants has gone steadily forward, and is of increasing value to the work of the Hospital.

The average number of patients resident in the Hospital was 134 as compared with 142 in the prevous year.

During the year the Committee considered 37 applications for admission or continuance of maintenance at reduced rates. All these were granted.

Commissioners of the Board of Control made two visits to the Hospital during the year, their reports being appended.

The Committee decided that in future the Accounts of the Hospital should be presented in a

revised form, which would make them clearer; and that the Accounts should be printed separately from the Report, and sent to each of the Governors.

Mr. J. G. Burn, who had been for many years a Governor and a member of the General Committee, died during the Summer, and in recording this loss the Committee wish to express their appreciation of his services.

It was with regret that in October the Committee took leave of Miss J. T. Mitchell, the Matron of the Manor House, who retired on pension after 28 years' service on the staff of the Hospital. Miss Mitchell had had a distinguished war service which carried her all over the world, and gained for her the distinction of the Royal Red Cross, and the best wishes of the Committee attend her in her well-earned retirement.

Finally the Committee must once again record their grateful appreciation of the service rendered to the Hospital by their Physician-Superintendent, Dr. G. W. T. H. Fleming, and his Medical Officers; and by the Matron, Miss MacMillan, and her Nursing Staff. The shortage of nursing staff persists, and until it is remedied there is inevitable pressure upon all engaged in the work, which the Committee must regret while they pay tribute to all that is accomplished. The Committee also gratefully acknowledge the valuable work done throughout the year by their large Staff in all the many other departments of the Hospital.

W. I. Croome,

March, 1949. *Chairman.*

REPORTS

OF THE

COMMISSIONERS OF THE BOARD OF CONTROL.

Barnwood House,
Gloucester.
16th April, 1948.

I have today completed my visit to this Registered Hospital which I began yesterday afternoon.

There were on the Statutory Books the names of 57 gentlemen and 75 ladies, of whom 19 of the former and 29 of the latter were voluntary patients, 2 ladies were on a temporary footing, and the remainder were certified. One lady—a voluntary—was on leave, so that there were 131 patients in residence.

I believe I have seen all of the patients in residence, and I found them comfortable and well cared for. Many were out of doors yesterday afternoon enjoying the fine weather.

High standards of nursing care are being maintained, and modern forms of treatment include prefrontal leucotomy and electric convulsions.

Since the last visit 5 gentlemen and 12 ladies have died. Nearly all of these patients were very advanced in years. Inquests were held in the case of 2 ladies, and the circumstances were reported to my Board at the time.

The homes and the villas were in excellent order.

The nursing staff consists of 19 male and 33 female nurses, of whom 8 of the latter are on a part-time basis. Four nurses of each sex are on duty each night. Fifteen male and 23 female nurses are certificated or registered in mental nursing.

Dr. Fleming and the Matron accompanied me throughout my visit and my thanks are due to them for the helpful assistance which they gave me.

R. G. Anderson,
Commissioner of the Board of Control.

Barnwood House,
Gloucester.
23rd September, 1948.

I have today paid the second visit of the year to this Hospital and I believe I have seen all the patients at present in residence. These number 50 gentlemen and 76 ladies. Of the former 17 are voluntary, 1 is a temporary patient, and 32 are certified; of the latter 24 are voluntary, 3 are temporary, and 49 are certified patients. Three gentlemen are away on leave or on trial, giving a total of 129 patients whose names appear on the Statutory Books.

Since the last visit admissions have numbered 61, and 59 patients have left, been discharged or were transferred to other care. In the same period 5 patients have died, death being due in each case to natural causes.

The hospital is in its usual good order and the grounds are looking at their best. The patients appear to have every comfort as well as skilled medical and nursing care.

The present nursing staff consists of 23 male and 33 female nurses.

I gave one private interview.

Dr. Fleming accompanied me throughout my visit and gave me every assistance.

I. Coffin Duncan,
Commissioner of the Board of Control.

REPORT
OF THE
MEDICAL SUPERINTENDENT

I have the honour to present my report for 1948.

There were in the Hospital on January 1st, 1948, 84 certified patients, 5 temporary patients and 58 voluntary patients.

Twenty-three certified patients, 6 temporary patients and 94 voluntary patients were admitted during the year, a total of 123 compared with 132 in 1947.

One hundred and forty-two patients were discharged, transferred or died. These changes left

the numbers on the books on the 31st December, 1948, as follows :—

		Male.	Female.	Total.
Certified Patients	...	34	47	81
Temporary Patients	...	—	2	2
Voluntary Patients	...	19	26	45

Two hundred and seventy patients of the three classes were under treatment during the year as compared with 279 in 1947 and 259 in 1946.

The daily average number of patients on the books during the year was 136 compared with 143 in 1947.

Of the direct admissions during the year, the percentage of voluntary admissions was 78, while that of certified patients was 17.

Discharges.

One hundred and twenty patients left the Hospital during the year. Of these 25 males and 30 females were discharged recovered, that is 54% males and 41% females, and 46% of the total direct admissions.

Thirty-seven patients were discharged relieved and 28 were discharged not improved, either to the care of friends or to other hospitals.

Deaths.

There were 22 deaths during the year, 9 male and 13 female, the average age at death being 77. Of the 22 deaths 7 had been in the hospital less than 1 year.

The general health both of patients and of staff has been very good during the year.

Research.

During the year the research department has continued to develop on the lines laid down. The chief subject of investigation has been the mechanism by which electro-shock causes improvement in various mental illnesses.

Again we have to thank Professor Golla and the Burden Neurological Research Institute at Bristol for much kindly help.

Dr. Ashby's report on work carried out in the research department is appended.

During the year we had an opportunity of watching a demonstration of the operation of transorbital leucotomy by Professor Freeman of Washington, D.C. This operation has subsequently been performed on eight of our patients with good results. At least two of these could not have had the ordinary operation of leucotomy performed owing to thickened arteries and high blood-pressure.

Nursing Staff.

The shortage of staff has remained the same as in 1947: the Rushcliffe scale of wages has not made the slightest difference to the supply of probationers.

General Matters.

The amount spent on repairs during the year was £4,034 compared with £3,143 in 1947 and £5,123 in 1938. The amount spent on furniture was £1,503 compared with £1,032 in 1947 and £2,624 in 1938.

I have again to express my appreciation of the loyalty and help I have received all through the year

from the Medical Officers, the Matron and the Staff.

To the Chairman and the Committee I wish to express my indebtedness for their great help and guidance.

G. W. T. H. Fleming,
Medical Superintendent.

REPORT FROM DEPARTMENT OF BIOCHEMISTRY.

(Dr. W. R. Ashby, *Research Biochemist*).

During the year 1948 the work has, as before, been co-ordinated closely with that of the Burden Neurological Institute under Prof. F. L. Golla.

The investigation, outlined in last year's report, into the effects of modern treatments on the activities of the pituitary gland and the adrenal cortex has yielded facts which may lead to substantial therapeutic advances. It has been found that convulsive treatment usually causes a brisk outpouring of adrenal cortical steroids in the first few days of its application. And there is evidence that the increased production of these steroids is associated with the success of the therapy. Particularly affected are the "sugar-active" cortins (hydroxylated or ketonic at C-11 and hydroxylated at C-17), and the "reducing" cortins (with a ketol

side-chain at C-17). This finding is of considerable interest, for these substances are of vital importance to bodily health and to the ability of the system to withstand severe stress. They increase the power of muscle to work. They enable the body to withstand the stresses of cold and fatigue. They play an important part in the metabolism of glucose. And they have enzymic actions too complex for description here. That these endocrine substances, known to be of fundamental importance in the body's resistance to stress, should be of psychiatric importance opens up new possibilities for advance in treatment.

In the brain, an important metabolite is glutamic acid, and an investigation has been conducted into the inter-relationships between the metabolism of this substance and the actions of the adrenal cortical steroids. It is known that the steroids are necessary for normal gluconeogenesis, for the fasting adrenalectomised animal is unable to convert its protein into glycogen, though it regains this power when certain steroids are administered. Glutamic acid is of special interest for it holds a key-position in deamination: it links those amino-acids which can be converted to it (arginine, histidine, proline, and lysine) to glutamine and χ-ketoglutaric acid, substances known to be active in the Krebs' cycle. But the chemical site of action of the steroids is unknown; in order to localise the actions of these substances, the power of various amino-acids to proceed to glycogen in the absence of the steroids has been investigated. It was found that, in gluconeogensis, absence of the steroids prevents the conversion of glutamic acid to glucose so that an important metabolite is not available. In order to provide further information, the effects

were studied also on other amino-acids, with the result that interesting and new facts on the subject have been discovered. These results form the subject of a paper which will be published shortly.

I have collaborated with Mrs. Bassett in a statistical study of the data which she has obtained on the effects of leucotomy on creative ability. We have found that this higher mental function in unimpaired by leucotomy. The finding is of some importance, partly because no previous evidence was available on this subject, and partly because the therapy may be more widely available now that it has been established that the operation has no directly adverse effect on this important higher function.

I have also continued my work on integrative cortical mechanisms. An apparatus, constructed to demonstrate certain principles, was exhibited at the meeting of the Electro-encephalographic Society on May 1st at the Burden Neurological Institute where it aroused much interest. A description of the apparatus has been published (Electronic Engineering, **21'** 379, Dec. 1948) and a brief account was broadcast by the B.B.C.

TABLE A 1 —SHOWING THE MOVEMENT OF THE HOSPITAL POPULATION DURING THE YEAR 1948.

	Voluntary Patients.						Temporary Patients.						Certified Patients					
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
On the Hospital Registers, January 1st, 1948				24	34	58				–	5	5				36	48	84
Total cases admitted during the year..				33	61	94				2	4	6				13	10	23
Cases Regraded				–	1	1				–	1	1				–	4	4
Total cases under treatment during the year				57	96	153				2	10	12				49	62	111
Cases discharged or transferred during the year—																		
Recovered	19	25	44				1	2	3				5	3	8			
Relieved	7	24	31				I	2	3				2	1	3			
Not Improved	7	10	17				–	–	–				4	7	11			
Regraded	–	3	3				–	3	3				–	–	–			
Died during the year	5	8	13				–	1	1				4	4	8			
Total cases discharged, transferred, regraded and died during the year				38	70	108				2	8	10				15	15	30
On the Hospital Registers, December 31st, 1948				19	26	45				–	2	2				34	47	81
Average daily number on the Registers during the year ..				19·8	28·9	48·7				0·7	2·9	3·6				36·4	47·3	83·7

	Male.	Fem.	Total.
Certified Persons (*i.e., separate persons in contradistinction to "cases" which may include the same individual more than once*) under care during the year	49	62	111
„ admitted	13	14	27
„ recovered	5	3	8

TABLE A2.—GENERAL TABLE, SHOWING THE MOVEMENT OF THE HOSPITAL POPULATION DURING EACH YEAR SINCE 1ST JANUARY, 1937, TOGETHER WITH THE RECOVERY AND DEATH RATES.
(UNDER THE MENTAL TREATMENT ACT, 1930, VOLUNTARY AND TEMPORARY PATIENTS ARE NOW INCLUDED).

YEAR.	ADMISSIONS.									Total number under Treatment.			DISCHARGED OR TRANSFERRED.									DIED.			Remaining on Registers December 31st			Average Daily Number on Registers.			Percentage of Total Recoveries on the Total Number of Admissions.			Percentage of Total Recoveries on the Direct Admissions.			Percentage of Recoveries yielded by Direct Admissions on the Direct Admissions.			Percentage of Deaths on Average Daily Number on Registers.		
	Direct.			Indirect.			Total.						Recovered.			Relieved.			Not Improved.																									
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
1937	12	22	34	2	–	2	14	22	36	75	117	192	4	6	10	3	5	8	2	5	7	6	7	13	59	91	150	61	88	149	28·5	27·3	27·8	33·3	27·3	29·4	33·3	27·3	29·4	9·9	7·8	8.7
1938	20	24	44	3	3	6	23	27	50	84	118	202	4	7	11	3	7	10	3	5	8	5	6	11	67	93	160	64	91	155	17·4	26·	22·	20·	29·2	25·	20·	29·2	25·	7·8	6·6	7·
1939	24	52	76	1	1	2	25	53	78	92	146	238	15	13	28	2	9	11	5	16	21	10	8	18	60	100	160	63	92	155	60·	24·5	35·8	62·5	25·	36·8	62·5	21·4	35·5	15·6	8·8	11·6
1940	27	34	61	3	7	10	30	41	71	86	136	222	9	9	18	8	1	9	4	15	19	8	13	21	59	98	157	62	97	159	32·1	25·	28·1	33 3	26·5	29·5	33·3	26·5	29·5	12·9	13·4	13·2
1941	25	40	65	4	7	11	29	47	76	86	138	224	6	14	20	4	8	12	8	10	18	8	13	21	60	93	153	58	·95	153	22·6	35·	30·	24·	35·	31·	18·5	35·	28·3	13·5	13 5	13·5
1942	27	41	68	3	1	4	30	42	72	91	136	227	11	20	31	6	7	13	5	4	9	5	12	17	63	92	155	60	92	152	36·6	47·6	43·	40·7	48·8	45·6	37·	48·8	44·1	8·3	13·	11·2
1943	45	54	99	3	3	6	48	57	105	115	150	265	19	30	49	4	8	12	13	4	17	7	12	19	68	95	163	68	94	162	39·6	52·6	46·6	42·2	55·5	49·5	40·	55·5	48·5	10·3	12·7	11·7
1944	26	48	74	5	1	6	31	49	80	99	147	246	14	24	38	9	4	13	5	10	15	16	15	31	55	91	146	61	95	156	45·1	49·	47·5	53·8	50·	51·3	53·8	47·9	50·	26·2	15·8	19·8
1945	35	60	95	–	2	2	35	62	97	90	153	243	7	31	38	3	17	20	9	8	17	8	8	16	63	88	151	61	92	153	20·	50·	39·2	20·	51·7	40·	17·1	50·	37·9	13·1	9·	10·5
1946	48	53	101	3	4	7	51	57	108	114	145	259	24	28	52	6	7	13	16	9	25	10	12	22	58	89	147	61	89	150	47·1	49·1	48·1	50·	52·8	51·5	45·8	41·5	43·6	16·4	13·5	14·7
1947	60	65	125	9	4	13	69	69	138	127	158	285	13	32	45	16	22	38	21	7	28	12	9	21	60	87	147	57	86	143	18·8	46·4	32·6	21·7	49·2	36·	18·3	49·2	34·4	21·	10·5	14·7
1948	46	74	120	2	7	9	48	81	129	108	168	276	25	30	55	10	27	37	11	17	28	9	13	22	53	75	128	57	79	136	52·1	37·	42·6	54·3	40·5	45·8	52·2	40·5	45·	15·8	16·5	16·2